



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art Unit: 2827
Examiner: Lourdes C. CRUZ

In Re PATENT APPLICATION Of:

Applicant(s): Yasufumi UCHIDA et al.

Serial No.: 09/930,710

Filed: August 16, 2001

For: REARRANGEMENT SHEET,
SEMICONDUCTOR DEVICE AND METHOD
OF MANUFACTURING THEREOF

Docket No.: OHG-125

REQUEST FOR
RECONSIDERATION

April 21, 2003

BOX AF

Assistant Commissioner of
Patents and Trademarks
Washington, D.C. 20231

Sir:

The Examiner's Action mailed on January 24, 2003 has been received and its contents carefully considered. Reconsideration of the Final Rejections presented therein is requested for at least the following reasons.

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REMARKS

The Examiner's Action mailed on January 24, 2003 has been received and its contents carefully considered. Reconsideration of the Final Rejections presented therein is requested for at least the following reasons.

Initially, Applicants would like to take this opportunity to thank the Examiner for allowing claims 8-15. However, for at least the following reasons, it is submitted that claims 1-7 are likewise patentably distinguishable over the cited reference.

The Examiner has rejected claims 1-7 as being anticipated by *Napierala* (USP 5,953,213). It is submitted that these claims are patentably distinguishable over this reference for at least the following reasons.

It is well settled that a reference may anticipate a claim within the preview of 35 USC §102 only if all the features and all the relationships recited in the claim are taught by the reference structure either by clear disclosure or under the principle of inherency.

Applicants' independent claim 1 is directed to a re-arrangement sheet. The re-arrangement sheet includes an insulating sheet. The insulating sheet has an element mounting region defined thereon. The re-arrangement sheet further includes conductive metallic patterns formed on the insulating sheet so as to surround, but not extend into, the element mounting region. This claimed configuration allows for an increase in the design freedom in configuring a semiconductor device that utilizes Applicants' claimed re-arrangement sheet, as discussed in Applicants' specification on page 5, line 26 through page 6, line 9. This claimed configuration is not disclosed (nor suggested) by the cited reference.

Naiperala disclose a multi-chip module which includes a carrier substrate 2. A component 7 is disposed on the carrier substrate 2. This reference also discloses forming an electrically conductive interconnect 9 on the carrier substrate 2. A carrier part 20 is disposed on the carrier substrate 2. At least one IC component 30 is mounted on the carrier part 20. Terminal pads 21 and terminal pads 22 are formed on the carrier part 20. Resistors 24 are used to connect the terminal pads 21 to the terminal pads 22. Bonding wires 12 are provided which connect terminals 10 and interconnect 9 to the terminal pads 22. Bonding wires 23 are provided which connect the IC component 30 with the terminal pad 21.

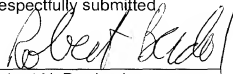
The Examiner's Action has equated the carrier substrate 2 disclosed by this reference as being an insulating sheet of a re-arrangement sheet, as recited in claim 1. The Examiner's Action has also held that the carrier substrate 2 has an element mounting region thereon, and refers to the region defined by the adhesive 11 as meeting this feature. The Examiner's Action has also stated that the claimed conductive metallic patterns are equivalent to the electrically conductive interconnects 9, the terminal pads 21, and the terminal pads 22 disclosed by this reference. The Examiner's Action states these features surround, and do not extend into, the element mounting region, as would be required by claim 1. However, it is respectfully submitted that these terminal pads and interconnects do not surround the region defined by the adhesive 11, as would be required by claim 1. Instead, this reference discloses providing the interconnects 9, and the terminal pads 21 and the terminal pads 22 on opposite sides of the region defined by the adhesive 11, so that this adhesive region 11

is disposed between, as opposed to being surrounded by, these terminal pads and interconnects. It is noted that the term "surround", even broadly construed, has a different meaning from the term "between". Because the cited reference does not disclose (or suggest) conductive metallic patterns formed on an insulating sheet so as to surround an element mounting region, as recited in claim 1, the configuration disclosed by *Naiperalá* does not enjoy the same advantages associated with Applicants' claimed invention. As such, it is submitted that Applicant's independent claim 1 has not been anticipated by, or otherwise rendered obvious in view of the cited reference. It is thus requested that this claim, and the claims dependent therefrom, be allowed, and it is further requested that this rejection be withdrawn.

It is submitted that this application is in condition for allowance. Such action and the passing of this case to issue are requested.

Should the Examiner feel that a conference would help to expedite the prosecution of the application, the Examiner is hereby invited to contact the undersigned counsel to arrange for such an interview.

Respectfully submitted,



Robert H. Berdo, Jr.
Registration No. 38,075
RABIN & BERDO, PC
Customer No. 23995
Telephone: 202-371-8976
Facsimile: 202-408-0924

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